

**REMARKS**

The Office Action mailed October 26, 2007, been received and carefully considered. Independent claim 1 has been amended to include the limitations of claims 2 and 3, claims 1 and 4-9 have been amended for formal reasons in accordance with U.S. Patent practice, and claims 2 and 3 have been cancelled. To the best of the undersigned attorney's information and belief, these changes contain no new matter.

A Terminal Disclaimer and the requisite fee accompany this Amendment.

**Claims 1 and 4-9 are now pending in the Application and are submitted to be in allowable condition. Claim 1 is in independent form.**

**I. The provisional rejection of claims 1 and 3-9 on the grounds of non-statutory obviousness-type double patenting over claims 1-9 of co-pending Application No. 10/593,820 is submitted moot in view of amendment of claim 1 to include the limitations of claims 2 and 3. Applicant notes that the Examiner has not provisionally rejected claim 2 over claims 1-9 of co-pending Application No. 10/593,820 so that this provisional rejection of claims 1 and 3-9 should be withdrawn since claim 3-9 depend ultimately from claim 1.**

**II. The provisional rejection of claims 1-9 on the grounds of non-statutory obviousness-type double patenting over claims 1-8 of co-pending Application No.**

**11/081,876 is submitted resolved by submission herewith of an additional Terminal Disclaimer and the requisite fee.**

**III. The rejection of claims 1, 2, 5, and 6 under 35 U.S.C. §102(b) as anticipated by Jacobs (US 5,792,727) is moot regarding cancelled claim 2 and is submitted resolved regarding claims 1, 5, and 6.** Independent claim 1 has been amended to include the imitations of dependent claims 2 and 3. Since dependent claim 3 has not been rejected as anticipated by Jacobs, this ground of rejection is submitted overcome and should be withdrawn.

Moreover, the lubricant compositions of Jacob contain spherical particles of a ceramic material which has a hardness of at least 5.5 on the Moh's scale. Thus, claims 1, 5, and 6 as amended are not anticipated by the disclosure of Jacobs and this ground of rejection should be withdrawn.

Further, as one of ordinary skill in the lubricating art would readily understand, ceramics are hard materials which would have a hardness which is not within Applicant's Young's modulus range of from 0.1 to  $10^4$  MPa as claimed in claim 1 which has been amended to include this limitation from claim 3. Moreover, as one of ordinary skill in the lubricating art would readily understand, ceramics are not buffering materials and would not have a buffering action when included in a lubricant composition. For at least these reasons, Applicant's claims are not made obvious by the disclosure of Jacobs.

**IV. The rejection of claims 1, 2, and 7 under 35 U.S.C. §103(a) as unpatentably obvious over Dobbs (US 4,123,367) is respectfully traversed.**

The disclosure of Dobbs relates to a method of reducing drag and rotating torque in a well bore having drilling fluid therein for rotary drilling of oil and gas wells. Minute spherical glass beads are incorporated in the liquid drilling fluid. The glass beads have a hardness of 5.5 on the Moh's scale (see claim 1).

As one of ordinary skill in the lubricating art would readily understand, glass is a hard material which would have a hardness which is not within Applicant's Young's modulus range of from 0.1 to  $10^4$  MPa as claimed in claim 1 which has been amended to include this limitation from claim 3. Moreover, as one of ordinary skill in the lubricating art would readily understand, glass beads are not a buffering material and would not have a buffering action when included in a lubricant composition. For at least these reasons, the disclosure of Dobbs does not meet Applicant's claims as amended so that no *prima facie* case of obviousness has been made out and this ground of rejection should be withdrawn.

**V. The rejection of claims 1, 3, 4, and 7 under 35 U.S.C. §103(a) as unpatentably obvious over Baum (US 2002/0039973) is respectfully traversed.**

The Examiner considers that process claim 4 of Baum describes thickening a base oil using particles of polyurea (a urethane compound) which would have a

Young's modulus within Applicant's range.

Applicant respectfully submits that the polyurea of claim 4 of Baum is a type of non-soap-based thickening agent which is a normal component added to lubricant base oil for preparing grease. It is formed of molecules having the shape of long threads so that when it is added to and mixed with the base oil, it functions to entangle with one another within the base oil to reduce the flowability of the base oil and the composition, and provide a semi-solid or solid grease.

The present invention according to amended claim 1 includes the limitations of claims 2 and 3, and Applicant notes that claim 2 (buffer particles which have a spherical shape) has not been rejected as obvious over Baum. This is undoubtedly because the polyurea thickeners of Baum are not spherical particles and one of ordinary skill in the art would not be led or motivated by the disclosure of Baum to replace the polyurea thickening threads with spheres because the artisan would understand the thickening mechanism and would understand that the process of Baum would be impaired or destroyed for its intended purpose if spherical particles were substituted for the polyurea threads. In view of this, Applicant submits that the disclosure of Baum does not meet Applicant's claims as amended and the further modifications of the Baum process needed to meet Applicant's claims find no teaching or motivation, so that no *prima facie* case of obvious may be fairly said to have been made out and this ground of rejection should be withdrawn.

**VI. The rejection of claims 8 and 9 under 35 U.S.C. §103(a) as unpatentably obvious over Brenner (US 6,750,426) in view of Braum (US 2002/039973) is respectfully traversed.**

The Examiner relies on the disclosure of Brenner as disclosing an electric power steering apparatus with a speed reduction gear. The Examiner acknowledges that Brenner does not disclose a lubricant composition between the gears. The Examiner therefore relies on the disclosure of Baum for the disclosure of a lubricant composition which the Examiner considers meets Applicant's claim 1.

Applicant's claim 8 relates to a speed reduction gear, comprising a small gear and a large gear that define an area when engaged which includes an engaged portion of both the small gear and the large gear and which is filled with the lubricant composition of claim 1. Applicant's claim 9 relates to an electric power steering apparatus, comprising an electric motor for steering assist which has an output that is transmitted to a steering mechanism by reducing its speed through the speed reduction gear of claim 8. Thus, both claims 8 and 9 include the lubricant composition of claim 1 as amended.

As discussed above, the present invention according to amended claim 1 includes the limitations of claims 2 and 3, and Applicant notes that claim 2 (buffer particles which have a spherical shape) has not been rejected as obvious over Baum. This is undoubtedly because the polyurea thickeners of Baum are not spherical particles and one of ordinary skill in the art would not be led or motivated by the

disclosure of Baum to replace the polyurea thickening threads with spheres because the artisan would understand the thickening mechanism and would understand that the process of Baum would be impaired or destroyed for its intended purpose if spherical particles were substituted for the polyurea threads. In view of this, Applicant submits that the disclosure of Baum does not meet Applicant's claims as amended and the further modifications of the Baum process needed to meet Applicant's claims find no teaching or motivation either in Baum or in Brenner, so that no *prima facie* case of obvious may be fairly said to have been made out regarding claims 8 and 9, and this ground of rejection should be withdrawn.

### **CONCLUSION**

In view of the foregoing amendments and remarks, Applicants submit that claims 1 and 4-9, and the Application are in condition for allowance. Reconsideration and passage of this case to issue are therefore requested.

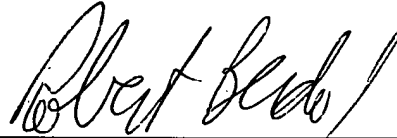
Should the Examiner consider that a conference would help to expedite the prosecution of this Application, the Examiner is invited to contact the undersigned to arrange for such an interview.

### **Request For Extension of Time**

Applicant requests a first extension of time for responding to the Office Action dated October 26, 2007. A first extension fee of \$120.00 is now due. This fee is

submitted herewith in the attached credit card form PTO-2038. Should the remittance be accidentally missing or insufficient, the Director is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and is requested to advise us accordingly.

Respectfully submitted,



February 26, 2008  
Date

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